



Cal OES
GOVERNOR'S OFFICE
OF EMERGENCY SERVICES



2014 Drought Response Report

State Operations Center

Situation Brief – March 24, 2014



Situational Summary

Information as of 3/17/14

On January 17, 2014 Governor Edmund G. Brown proclaimed a State of Emergency and directed state officials to take all necessary actions to prepare for drought conditions. The State Operation Center (SOC) is activated to implement objectives in support of the Governor's priorities. The lack of winter rain and snowfall has resulted in extremely dry conditions in many parts of the State. Reservoir levels are down significantly from where they should be on average for this time of year. If conditions continue without substantial rainfall, severe impacts to municipal water supplies, agriculture (plants and livestock) and firefighting capabilities are likely in store for the State over the next few months. Negative economic impacts will also result.

Dry conditions are expected statewide through mid-week, with record high temperatures in some places. A weak pressure front will move in by the middle of the week with cooling temperatures, but little to no precipitation is expected.

Despite above average rain and snow in February and early March, much of California has received only about 50% of normal precipitation. Heavy rain and snow would have to fall throughout California very frequently from now until May to reach average annual rain and snowfall levels. Even with such precipitation, California would remain in drought conditions, due to low water supplies in reservoirs from the two previous dry years. The drought could result in severe impacts to the municipal water supplies, wells, agriculture (plants and livestock) and firefighting capabilities for several months. The SOC continues to be activated to monitor the situation statewide, and support regional and local operational areas.

Situational Summary (cont'd)

Information as of 3/18/14

- The Taskforce continues to meet regularly to take actions that conserve water and coordinate state response to the drought.
- The State Water Resource Control Board (SWRCB) staff participated in the Small Systems Inter-Agency Outreach Committee meeting USDA Rural Development, California Water/Wastewater Agency Response Network and Rural Community Assistance Corporation on March 5, 2014.
- The recent snowpack survey conducted on 3/12/14, recorded California snowpack at 29% of normal. The statewide snowpack as of March 6 indicates a snow water content of 33 percent of average to date and 30 percent of the April 1 average.
- DWR has announced that water essential for health and safety will be delivered through the state water project in spite of the zero allocation policy. Deliveries will be boosted if storms produce enough rain and snow to increase reservoir storage and the snow pack.
- On March 27, 2014, SWRCB will be at the groundbreaking ceremony for the City of Visalia's \$147 million Water Conservation Plant upgrade and recycled water distribution pipeline, made possible by an earlier CWA SRF loan from the State Water Board.
- Cal OES continues to gather drought-related costs from state agencies and local governments.

Drought Impacts

1. Drinking Water (Information as of 3/11/14)

- The California Department of Public Health (CDPH) is developing questions that will be included in the upcoming Annual Report (AER) to gather data on water conservation and drought preparedness. The data collection will begin 3/10/2014, with a deadline to complete of 4/18/2014.
- CDPH Drinking Water District Engineers and regional/local Cal OES personnel provided nine of the ten site visits to public water systems identified as having acute drinking water supply issues. The last visit is scheduled for 3/14/2014.
- CDPH establish and continually updates the CDPH Drinking Water website, as needed at: <http://www.cdph.ca.gov/certlic/drinkingwater/Pages/DroughtPreparedness.aspx>.
- CDPH activated an Information Line to answer concerns or questions about public drinking water systems. Contact (855) 737-1796, Monday through Friday, 8:00 AM to 5:00 PM, effective Monday, February 24, 2014.

2. Fires (Information as of 3/10/14)

- Fire risk, which has been high, will be lower as a result of the two storm systems which passed through the state on 2/26/14, and 2/28/14. CALFIRE reports that this current fire activity is well above the year-to-date average of 200 fires, burning 626 acres.

Drought Impacts (continued)

3. Economic Impacts (Information as of 3/12/14)

- Agriculture Secretary Tom Vilsack declared two more California counties, Riverside and San Diego official disaster areas, bringing the total number of counties in this category to 56 of the 58 counties. Farmers in these counties are eligible for low interest emergency loans and other disaster assistance programs. The remaining two counties (Imperial and San Francisco) are covered as "contiguous" areas – as such, all counties in California are eligible for assistance.
- By law, SBA makes Economic Injury Disaster Loans (EIDLs) available when the U. S. Secretary of Agriculture designates an agricultural disaster. Agriculture Secretary Tom Vilsack declared this disaster on February 26, 2014.
- No information is available yet regarding impact on labor due to drought. Employment Development Department (EDD) will be sending weekly updates.

4. Agricultural Impacts (Information as of 3/12/14)

- On Monday, March 17, 2014, California Department of Food and Agriculture will hold an additional drought information session, per the request of Congressman Jared Huffman and Assembly Member Wes Chesbro in Sonoma county (Cloverdale) from 4:30pm-7:00pm at the Cloverdale Citrus Fair Auditorium. CDFA along with USDA and a number of state, local and independent agencies will host a drought open-house event where agency representatives will hand out information and answer questions regarding drought assistance resources.

5. Community Impacts (Information as of 3/12/14)

- Farmworker groups participated in a drought meeting of the State Board of Food and Agriculture on 3/4/14 at the University of California-Merced.

Federal Resources/Actions

Information as of 3/17/14

- U.S. Interior Secretary Sally Jewell travelled to California last week and visited the Jones Pumping Station in Tracy, one of the key components of the Federal Water Project. Secretary Jewell held an in-depth meeting with water contractors who are supplied by federal water reservoirs and toured the Jones Pumping Station. She reiterated the federal government's commitment to supporting California's drought response during her visit.
- **President signs the Drought Information Act:** Congress passed and the President signed a federal bill to reauthorize the National Integrated Drought Information System Reauthorization Act (NIDIS). This act enables a federal early warning system for droughts by providing information, forecasts and assessments to vulnerable states. NIDIS was championed by the Western Governors Association, based on the drought vulnerability of western states.
- Water managers from the U.S. Bureau of Reclamation have announced initial 2014 water allocations to those who receive water from the federal Central Valley Water Project. These allocations include 0% projected allocation to agriculture users south of the Delta, similar to the Department of Water Resources (DWR) allocation in late January, which reflect historic lows in available water. The Bureau will update these allocations in the coming months based on changes in precipitation and drought conditions.
- The Bureau of Reclamation also highlighted longer term actions that will increase the reliability and sustainability of the federal water system in California. These federal actions align with California state government's recently released Water Action Plan.
- The National Aeronautical and Space Administration (NASA) announced it will apply remote sensing technology to detail impacts of the drought, such as fallowed fields and reduced groundwater supplies. NASA is providing this information to the state's DWR to help manage water resources.

State Resources

Information as of 3/10/14

Governor Brown signed emergency legislation that provides funding for shovel-ready water projects and emergency assistance to communities hurt by the drought. The proposal also streamlines state rules to enable more water recycling, strong enforcement of water rights and housing assistance to migrant workers. Funding in the bill includes:

- \$549 million for infrastructure grants to increase storm water capture and use of recycled water, improve management of groundwater storage, and strengthen water conservation.
- \$40 million from the proceeds of the state's cap-and-trade program to help local water agencies improve their water and energy efficiency, help farmers upgrade irrigation and water pumping systems to reduce water and energy use, and to enable retrofits in commercial and residential buildings that improve water and energy efficiency.
- \$25 million for emergency food assistance in areas hard-hit by the drought.
- \$21 million for housing-related assistance to drought victims.
- \$15 million to help communities that face drinking water shortages access alternative water supplies.
- \$14 million to improve groundwater management across the state, including help to disadvantaged communities with groundwater contamination exacerbated by the drought.

State Resources

Information as of 3/18/14

- Real-time water management leads to post-storm water supply: State and federal water management agencies continue to work together to allow exports of additional water from the Delta based on storms in the last six weeks. Recent precipitation has provided a window of opportunity to capture additional water for storage both north and south of the Delta, so state and federal water projects have increased pumping for a limited time to capture as much water as possible under current regulatory standards.
- State streamlines approvals for domestic water tanks: The California Department of Fish and Wildlife and the State Water Resources Board announced that they will expedite approval of storage tanks built by rural residents for domestic water use. These storage tanks help protect drinking water supplies and increase fire safety by giving rural residents a water supply that they can manage on their own property.
- Plan released to help fish survival and commercial fishing: The California Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service last week released a contingency plan for the release of small fish raised in federal and state hatcheries. Due to the drought, new measures will be taken to release the hatchlings in portions of the Delta that allow for their migration to the ocean while enabling their eventual return to lay eggs and continue their life cycle.
- State launches online center for drought information: The Governor's Office and state agencies have launched drought.ca.gov, which will provide a central, one-stop location for drought information. Agencies will continue their own drought webpages, and drought.ca.gov will include a listing of these webpages.
- The California Governor's Office of Emergency Services (Cal OES) is joining Save Our Water – a partnership between the Association of California Water Agencies (ACWA) and the California Department of Water Resources (DWR) – to launch the 'Californians Don't Waste' campaign, bringing awareness of simple ways citizens can save water every day. Visit SaveOurH2O.org.



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State Resources

Information as of 3/17/14

- Local government toolkit now available: The Governor's Office of Planning and Research has posted online its drought toolkit for local governments, which outline actions that communities can take to respond to the drought. Debbie Davis, Local Drought Liaison, is leading this effort (drought.clearinghouse@opr.ca.gov, 1-916-327-0068).
- Tribal consultation: Last week on March 21, the Governor's Tribal Advisor held a Statewide Consultation Call with Tribal leaders to continue discussions on drought response with Drought Task Force officials.
- Government Facilities Training: The Department of General Services held a water conservation training last week for facility managers from state and local governments, as well as school districts across the state, to provide information and support to their water use reduction efforts. Over 300 managers from across the state participated.
- Cost Data: Cal OES continues to gather drought-related costs from state agencies and local governments, which is reported weekly to the Drought Taskforce.
- Governor's Drought Task Force: The Taskforce continues to meet weekly to take actions that conserve water and coordinate state response to the drought.

State Advance/Strategic Planning

Information as of 3/20/14

State actions looking forward for 30, 60, 120 days ahead will focus on:

- State and federal funding and legislative actions.
- Agricultural support, including USDA programs and other assistance to farmers.
- Actions to address water system operations and water supply, including curtailments, transfers, delta emergency actions.
- Actions to assess and assist with emergency needs related to drinking water.
- Assessment of hydropower generation, and any direct or indirect impacts to the electricity supply.
- Actions to address long-term habitat preservation.
- Community support needs and delivery of needed services such as food, rental/housing assistance, utilities assistance and support to non-profit organizations.
- Public health and safety issues such as increased fire threat, security threats, and activation of contingency plans.
- Actions to anticipate and address air quality impacts from continuing drought.

Current Missions

Information as of 3/13/14

Open Missions:

1. 2014-Inland-2185 Tuolumne County does not have a water master or any alternative resources to assist in determining the health of their ground water system. Tuolumne County has requested state agency expertise to assist with this determination. DWR has taken the lead and is coordinating with CDPH and State Water Resources Control Board (SWRCB) to gather recent groundwater level and water quality information that can be used to populate a GIS map. DWR has produced a one page information paper outlining this information and expertise the State can offer. This information paper has been forwarded to Inland Region and they have submitted it to the County. Update: DWR is still gathering data and anticipates fulfilling this mission by the end of March, 2014.

County Drought Task Force Meetings

Information as of 3/24/14

County Drought Task Force Upcoming Meetings		
Inland Region		
County	Previous Meetings	Upcoming Meetings
Butte	2/18/2014	5/19/2014
Kern	3/13/2014	4/10/2014
Madera	3/11/2014	4/29/2014
Merced	3/19/2014	4/17/2014
Modoc	2/12/2014	
Nevada	2/28/2014	
Placer	3/12/2014	
Plumas	3/17/2014	4/14/2014
Sacramento	3/21/2014	4/11/2014
San Joaquin	3/19/2014	4/16/2014
Siskiyou	3/12/2014	
Stanislaus	3/19/2014	
Sutter	3/13/2014	4/10/2014
Tehama	2/18/2014	
Tulare	3/10/2014	4/14/2014
Tuolumne	2/11/2014	3/28/2014
Coastal Region		
County	Previous Meetings	Upcoming Meetings
Mendocino	2/26/2014	
Monterey		
San Mateo		3/18/2014
Santa Clara	2/27/2014	
Southern Region		
County	Previous Meetings	Upcoming Meetings
San Luis Obispo	2/28/2014	3/19/2014
Santa Barbara	3/12/2014	4/9/2014
Orange		4/1/2014



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County Updates

Santa Barbara County (as of 3/19/14):

- The drought proclamation was re-ratified on March 18, 2014, under the guidance of the Board of Supervisors.
- The joint bid submitted by Santa Barbara City and Montecito Water Districts to purchase the water being sold by Madera did not win the purchase, however future options are being explored.
- Public Information and Communications Strategy - Presently Santa Barbara County works collaboratively with a network including the Santa Barbara County Water Agency, cities that provide water within the County, as well as water districts and community service districts. Together, these agencies sponsor programs that promote water conservation and awareness. Each water purveyor however plays a distinct role in communicating specific messages and providing information to their ratepayers regarding their individual water supply status and any district specific conservation measures.
- Santa Barbara County has submitted an Emergency Managers Mutual Aid (EMMA) request for resources from Ventura County OES. The task includes assisting with the development of situation reports and action plans pertaining to the drought proclamation. Ventura County has responded to the request and will be sending someone to assist.
- Local water Districts and Municipalities will begin reporting drought-related financial impacts next week.
- Staff attended the Cattleman's Association monthly meeting on March 12, 2014 to provide drought update.
- Concern: The drought legislative package signed by the Governor does not appear to have funds available for the Emergency Pumping Facility Project.
- Cachuma Operation and Maintenance Board (COMB): Qualified bidders have been selected. Proposals are due April 4, 2014 with contractor selection on April 8, 2014.

County Updates (continued)

San Joaquin County (as of 3/11/14):

- Most cities/agencies are maintaining a minimum 20% voluntary conservation measure and enforcement of municipal codes for water waste.
- OES continues to maintain a centralized web site and social media presence (<http://www.sjgov.org/oes/2014%20drought.htm>) for Operational Area (OA) participating jurisdictions.
- San Joaquin County Public Works was issued a purchase order for E-PUR to start organizing wells for enhanced drought monitoring. Planning continues for drought outreach.
- Local government agencies were advised of the state water conservation training for government facilities on Wednesday, March 12, 2014.

San Mateo County (as of 3/18/14):

- The County Emergency Managers' Association date has changed to March 20, 2014, 10am at the Belmont City EOC in Belmont, CA.
- The County EMA will hear a special presentation from Bay Area Water Supply and Conservation Agency (BAWSCA) on drought planning. The Association will determine the need to form a County Drought Task Force at the meeting.

Plumas County (as of 3/17/14):

- Environmental Health completed formal survey of public drinking water systems serving local communities. No immediate shortages in water supplies are anticipated. Two (2) systems indicated some concern for possible diminished supplies as summer progresses. Environmental Health will continue to monitor for changes/updates.
- Environmental Health receiving inquiries from agriculture producers to install groundwater wells in response to diminished surface water supplies. No new applications submitted to date.

County Updates (continued)

Mariposa County (as of 3/7/14):

- Prop 84 Emergency grant funding will be used to drill up to two new hard rock wells and improve their existing primary well. Anticipated to start drilling as soon as next week. CDPH Prop 84 Emergency Grant Funding Agreement is being processed for Issuance.

Stanislaus County (as of 3/20/14):

- Local irrigation districts reported the beginning of the water season was delayed by one week to one month due to the rain received at the end of February and beginning of March. The end of the water season has not been extended.
- Representatives from the Stanislaus County Farm Bureau advised that hundreds of thousands of acres are expected to be fallowed throughout the San Joaquin Valley. However, currently there is no quantifiable information specific to Stanislaus County.
- Stanislaus County Animal Services is monitoring for large animal abandonment due to the drought. At this point in time, they have not seen a significant increase but will continue to monitor.
- Turlock Irrigation District advised that at the end of the irrigation season in October, there will be no carry over storage for irrigation for 2015. Water allocations for 2015 will be based on inflow received during the rainy season.

County Updates (continued)

Placer County (as of 3/18/14):

- North Tahoe Public Utility ordered water conservation items to provide to customers. The cost is \$4,728. Placer County will be focusing on drought mitigation projects. Placer County would request that the State support regional, multi- jurisdictional drought mitigation project as proposed by water providers.
- Placer County Water Agency (PCWA) passed a resolution at their March 6th board meeting, making available 5,000 acre feet of water to be purchased by customers in Zone 5 to be used for livestock, permanent crops and annual crops that use drip system. This is a significant change as Zone 5 was slotted to receive no water from PCWA as a result of the drought.

Kings County (as of 3/18/14):

- The Lemoore Union Elementary School District is aiming to cut water use by 20 percent over the next few months. The district will no longer water during the daytime and is planning to reduce their weekly water schedule from 3 days a week to 1 or 2 days. They will also hold off on watering areas that don't get a lot of use from the students.
- Hanford Elementary School District is currently only watering one day a week during the night and will continue to water less as spring and summer arrive. They're also postponing some school beautification projects that were in the works.

Yolo County (as of 3/11/14):

- Yolo County Ag Commissioner is projecting a \$60,000 to \$100,000 revenue shortfall to the budget due to geographical fallowed field issues.

County Updates (continued)

Fresno County (as of 3/11/14):

- Due to the drought, Fresno County is expecting unemployment levels to increase to approximately 40% , similar to the impacts in previous water-short years, such as 2009.
- Fresno County Agriculture Commissioner is working with the County Farm Bureau to attempt to accurately quantify the potential impacts that the drought will have on the agricultural economy in our County. It is estimated that 500,000 or more acres of productive farmland may be fallowed this year as a result of the drought. The value of lost crop production is estimated to be \$1.7 billion. The value of lost economic activity tied to reduced crop production is estimated to reach \$5 billion.
- Significantly reduced plantings of iceberg lettuce and broccoli have already occurred. Later in the year we will see reduced production of bell peppers, melons, processing tomatoes and other annual crops. Reduced plantings of these crops will have a major impact on available jobs.

Humboldt County (as of 3/11/14):

- Recent rains filled Ruth Lake Reservoir which serves 2/3rds of the residents in the county. However, there are some concerns about residents' wells in the southern and northeastern part of the county.

Tuolumne County (as of 3/18/14):

- Tuolumne Utility District (TUD) has been working with PG&E to request an extension from the Federal Energy Regulatory Commission (FERC) of a temporary variance of minimum flow requirements out of Lyons Reservoir. That extension was ordered on March 18, 2014 and it expires June 15, 2014.
- TUD and smaller water districts/companies are looking for alternative sources of water, such as Twain Harte Community Services District (THCSD). They are trying to develop two older wells that have not been utilized in the past, to determine if they have sufficient quantity and quality of water to help supply their own customers thereby reducing the need from TUD. There are 138 small water companies within the county, all with varying number of customers.

County Updates (continued)

Siskiyou County (as of 3/17/14):

- On March 11, 2014, the Siskiyou County Board of Supervisors ratified the local emergency declaration. The Board requested some additional information be added to the declaration.
- Siskiyou County has received a fair amount of precipitation over the past two weeks. The precipitation amounts have not made a significant improvement on our overall water deficit. The storms that passed through the area resulted in high elevation snow levels, thus providing little to no snow accumulation in the counties higher elevations. Snow pack is extremely vital to the county water supply.
- On March 6, 2014, Inland Region Administrator Eric Lamoureux attended a meeting with the Siskiyou County Office of Emergency Services to discuss the counties current and future water concerns. Also in attendance were representatives from local agriculture, the Shasta Valley and Montague water districts and boards, Siskiyou County Department of Agriculture, Sheriff's Department, Public Health and Environmental Health. A second meeting was held in the afternoon with representatives from the Scott Valley area. It was reported during the meeting that Dwinnel Reservoir is currently at approximately 7800 acre feet. The maximum acre feet Dwinnel holds is approximately 44,000 acre feet. The average for this time of year is 33,000 acre feet. A best-case scenario, which would require consistent heavy precipitation over the next month, would result in an estimated capacity of 11,000 acre feet. Given that scenario, the City of Montague would run out of domestic water sometime in August. Without precipitation over the next month, it is estimated that the City of Montague will run out of domestic water around the beginning of July.
- Based off the status of current water levels, coupled with environmental regulations, no water will be released from Dwinnel for agriculture this year, affecting all of the agricultural community it services. There are some alternative measures that both the Montague and Shasta Valley water districts are considering, but may require support from state resources.



County Updates (continued)

Siskiyou County-cont'd (as of 3/10/14):

- In the Scott Valley area, the valley water supply is dependent on high elevation snow accumulation. The run off from the mountains is what supports domestic and agricultural water for the different areas in the valley. This year, there is little to no measureable snow in the mountains surrounding the valley, thus causing a significant reduction of water flow from the tributaries supporting the valley's water supplies. Current areas of concern are the City of Etna and the town of Callahan. These communities will be monitored as the season progresses.
- Another concern in Scott Valley is number of salmon that are current in the Scott River water tributary. Due to the lack of water in the tributaries feeding the Scott River, the salmon are not able to make it into the upper portions of the tributaries to their normal spawning locations. Without being able to access the tributaries, the salmon are staying in the Scott River and creating beds. It is anticipated that without significant precipitation, the Scott River water level will drop to the point that the salmon may become landlocked before that they make their return run back down the river. This would potentially result in the death of several thousand salmon. Scott Valley ranchers and water boards are working with state agencies to develop contingency plans for the survival of the fish.
- The Siskiyou County Drought Task Force will continue to collect critical drought information and outreach to the community.

County Updates (continued)

Kern County (as of 3/18/14):

- Site visits were scheduled for March 18 in the Frazier Park Area. Governor's Office of Planning and Research, Cal OES and Kern Co. Environmental Health representatives will be on hand to assess water issues in the area.
- Prior to the recent rains and strict conservation measures the Water System relied on hauled water to supplement their existing sources. Prop 84 Emergency Funds used to drill up to two test wells, conduct test pumping, and obtain water quality samples. If the pump test and water quality analysis results are acceptable, one of the test wells will be converted into a production well and connected to the existing distribution system. They have identified test well locations and are working on the test well Plans and Specifications.
- As a result of the recent rains the springs are now producing enough water system has not needed to haul water since January 2014. The project solution is still being evaluated. Recent snow should keep the springs producing for at least a few more months.
- Kern County Board of Supervisors extending their continuation of the Local Emergency due to drought and proposed resolution calling for voluntary water conservation on March 11, 2014.

Glenn County (as of 3/11/14):

- Glenn County Board of Supervisors reaffirmed their local disaster declaration on March 4, 2014.

Merced County (as of 3/20/14):

- Proclamation renewal is set for March 25, 2014 at the Board Meeting.
- Merced County has established a Drought Task Force. First meeting was on March 18, 2014, and next meeting will be held April 17, 2014.

County Updates (continued)

Madera County (as of 3/18/14):

- A Drought 2014 tri-fold informational brochure was developed by Cal OES for distribution within our communities. It provides contact information for emergency needs, assistance programs, health care services, employment services, and programs for farmers, ranchers and other businesses. The tri-fold template will be sent to OA Partners.
- The Board of Supervisors approved a water contingency/reduction plan on March 11, 2014. The goal is to reduce water usage by 25% throughout County operated water districts.
- Sending notices to inform customers regarding water usage/over usage; applying a 2-days a week water usage plan to help regulate. This information is also being posted to the County website.
- Madera County Environmental Health sent out a Drought Letter/Survey (to 46) to applicable water systems (all community and non-transient/non-community water systems) under their jurisdiction and requested a response by March 17, 2014.
- The water level on the primary and secondary well at Liberty High Complex has dropped about 100 feet since 2001, 63 feet since 2009.
- On March 7, 2014, local Farm Services Agency (FSA) attended the Drought Disaster Workgroup, a coalition of Ag Commissioners from the Coast, Sacramento Valley and San Joaquin Valley areas, and FSA representatives. This group will meet periodically to share area information and to be informed of FSA assistance programs and requirements.
- The California Department of Public Health (CDPH) Drinking Water Program (DWP) announced on March 7, 2014 that the West Goshen water system, previously identified as being in immediate danger of acute drinking water shortages, is no longer at risk due to emergency funding to build an interconnection with a larger drinking water system and replace a failing well pump. As the ongoing extreme drought conditions continue in the state, CDPH continues to assist drinking water systems at risk of running out of water.

County Updates (continued)

Contra Costa County (as of 3/17/14):

- Eastbay MUD: No major changes. As of March 13, their reservoirs are at 63% capacity, 80% of average. Precipitation is 53% of average. They need at least four good storms to not have a water shortage emergency declared this April. They are still asking for a 10% voluntary cutback from customers and have started making arrangements to access our Sacramento River dry-year supply via the Bureau of Reclamation and a possible water transfer with Placer County Water Agency.
- Contra Costa Water District: Their Board will likely adopt a “voluntary 15% drought reduction program” the week of March 17, 2014. So unless there is further direction at the State level they don’t see changing from “voluntary” to “mandatory” restrictions. CCWD customers will have an adequate supply for 2014 but will need to be efficient in their water use. Their newly expanded Los Vaqueros Reservoir will provide additional local supply source to make-up for the reduction in our Reclamation water supply contract this year.

San Diego County (as of 3/17/14):

- San Diego continues to monitor the drought situation, there has been no change. One inquiry was received from a farmer with a 300 acre parcel in San Diego inquiring if there was any assistance available for well drilling. His well used to produce 1/2 acre feet per say and is now only producing 20 gpm. The OA referred him to the County Department of Environment Health for the well-drilling permit process and additional information.

Butte County (as of 3/18/14):

- DWR Division of Safety of Dams approved Paradise Irrigation District's (PID) request to increase water levels in Magaila Dam. PID is a municipal water purveyor for the Town of Paradise.

Weather Synopsis by Region

Information as of 3/24/14

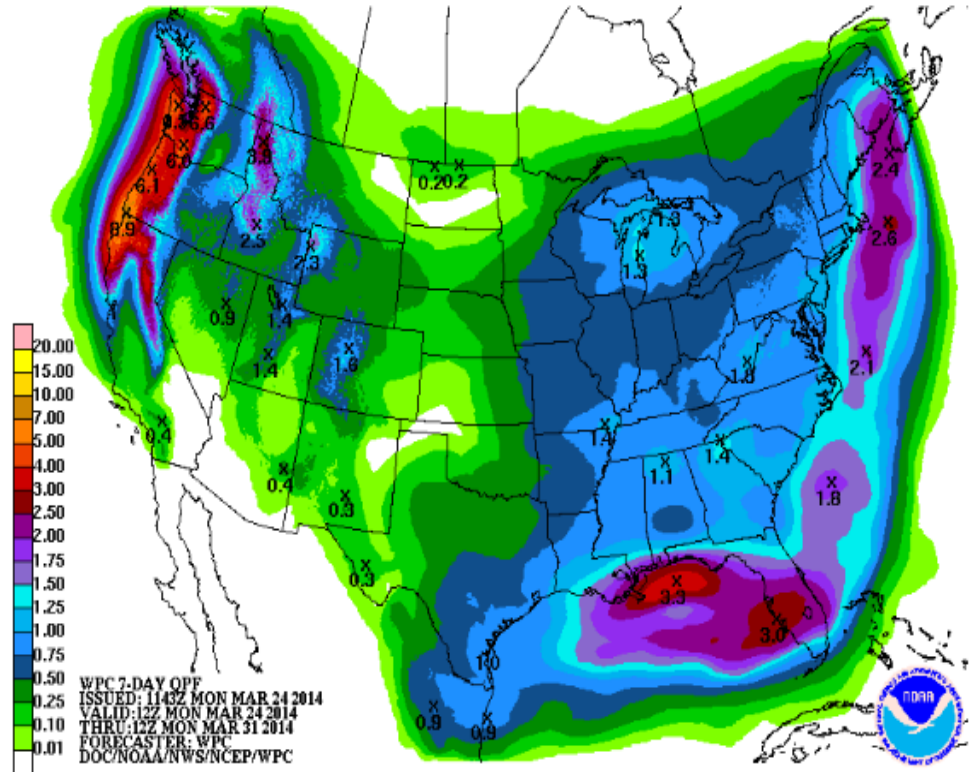
Northern & Central California

Eureka Weather:

Dry and warm conditions today will give way to wet and unsettled conditions tonight as a cold upper trough moves into Northwest California. Rain and mountain snow chances will continue through the week as the region enters into a much more stormy weather pattern.

San Francisco Weather:

An upper level ridge across the eastern Pacific will maintain dry conditions and above average temperatures to start off the work week. On Tuesday, a Pacific storm system will approach Northern California and bring chance of precipitation to the Bay Area through mid-week.



<http://www.hpc.ncep.noaa.gov/qpf/day1-7.shtml>

Weather Synopsis by Region

Information as of 3/24/14

California Precipitation Graphic

72 hour (3/20/14-3/23/14)

Central California and Southern San Joaquin Valley

Sacramento Weather:

One more day of very warm and dry weather today before a significant pattern change comes. Wet and cooler weather arrives Tuesday through midweek. Significant snow and gusty winds are possible in the mountains through early Thursday, followed by unsettled weather. Another strong storm is possible for the weekend and into early next week.

Hanford Weather:

High pressure over the Eastern Pacific will keep sunny and warm conditions in place into Tuesday. A storm system will reach Central California beginning Tuesday night bringing precipitation to much of the area.



<http://www.cnrfc.noaa.gov/google.php>



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Weather Synopsis by Region

Information as of 3/24/14

Southern California

Los Angeles Weather:

There will be slightly warmer weather early this week across the mountains and deserts, but a deep marine layer will keep temperatures from getting much above normal across Coastal and Valley areas. Low pressure will approach on Tuesday bringing cooler weather to all areas along with a chance of showers for mid-week. A warming trend is likely Friday and Saturday with the return of high pressure.

Orange, San Diego, Western Riverside, and Southwestern San Bernardino Weather:

A weak upper level low pressure system southwest of Point Conception will move inland across northern Baja tonight. This will maintain the marine layer with areas of night and morning coastal low clouds and fog. A minor amount of mid-level moisture will bring some afternoon clouds to the mountains. For Wednesday through early Thursday, a trough of low pressure moving inland through California will bring gusty west winds in the mountains and deserts and mainly light precipitation along and west of the mountains. Fair and warmer conditions are expected for inland Counties for Friday through Sunday under high pressure aloft.

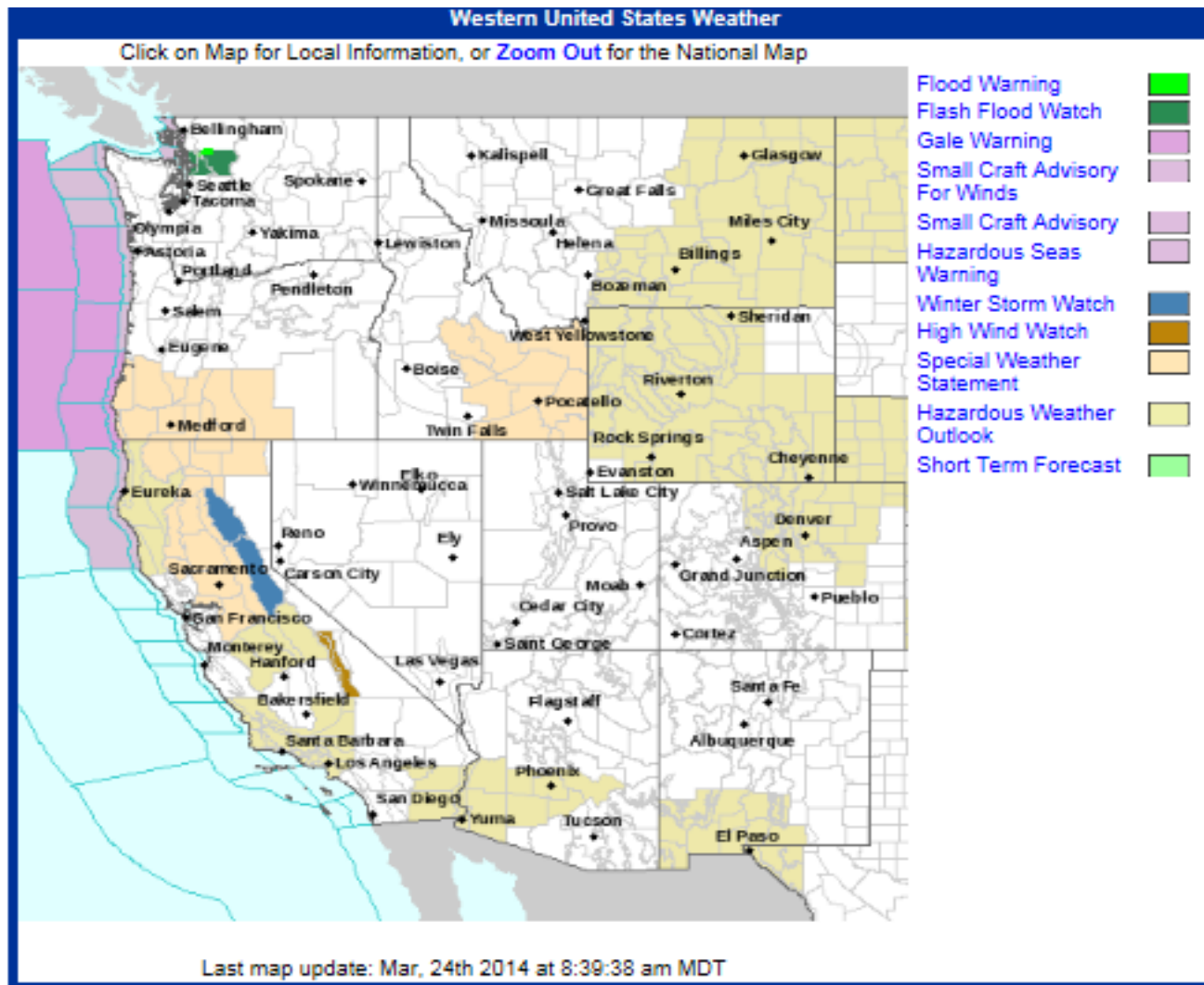
Southeast California Weather:

Dry weather with occasional high clouds is expected through mid-week along with above normal temperatures in the low to mid 80s. A Pacific trough will bring breezy conditions and slightly cooler temperatures to Southeastern California Wednesday and Thursday.



State Weather Map

Information as of 3/24/14



<http://www.wrh.noaa.gov/>



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National 7-day Significant Fire Potential Outlook



Legend

Fuel Dryness

- Moist - Little or no risk for large fires.
- Dry - Low risk of large fires in the absence of a "High Risk" event.
- Very dry - Low/Moderate risk of large fires in the absence of a "High Risk" event.
- Data Unavailable.

High Risk Events

Wind

Hot and Dry

Lightning

Missing Stations

- Yurok
- Whitmore Calito

California - North Area 7 Day Significant Fire Potential

Predictive Service Area	Thu Mar 20	Fri Mar 21	Sat Mar 22	Sun Mar 23	Mon Mar 24	Tue Mar 25	Wed Mar 26	Thu Mar 27
NC01 - North Coast								
NC02 - Mid Coast								
NC03A - Bay Area-Marina								
NC03B - Diablo/Santa Cruz Mtns								
NC04 - Northwestern Mtns								
NC05 - Sacramento Valley								
NC06 - Northeast CA								
NC07 - Northern Sierra								
NC08 - East Side								

Weather

A weak low pressure trough is passing over the West Coast today. There is a slight chance of rain showers this afternoon in eastern areas from the OR state line to the Central Sierra, but amounts will be 0.10 inches or less. At the surface light to locally moderate winds are expected during nights and mornings in the Northern Sacramento Valley and surrounding foothills through Saturday morning.

High pressure will move overhead Saturday through early Monday and produce warmer temperatures with light winds throughout the region.

Late on Monday the high will move east as a Pacific low pressure trough approaches the coast. The associated cold front will move onshore by Tuesday morning with light to moderate rain. This system will move across the region Tuesday and Wednesday with rainfall totals over the higher terrain of 0.50-1.50 inches, 0.25-0.50 inches at lower elevations in the north (0.25-0.50 inches), and a trace to 0.20 inches elsewhere. Snow levels will drop to 3500 ft in the north and 5000 ft in the south Tuesday night as colder air moves in. Cool and humid conditions will continue Thursday into Friday, with another system expected to reach the coast by late Friday.

Fuels/Fire Potential

The 7-Day matrix shows mostly **Moist** (green) fuels. However, the recent foehn winds and drying have pushed a few lower elevation areas in the south that are dominated by fine fuels into the **Dry** category. Although the **Dry** category doesn't describe the entire PSAs (NC03A and NC03B), it does represent fairly significant portions of these PSAs that have elevated large fire potential. Smaller parts of NC02 and NC05 (lower elevations in the south) also have areas that that could be described as **Dry**.

Elsewhere smaller areas of **Dry** conditions can be found at lower elevations where there are sites without much green annual grass present, or having heavy leaf litter, or in drought-stressed live or pre-green fuels; while at mid to higher elevations: areas of open slash, or sites having a lot of pre-green (or freeze-damaged) brush, or other combinations of drought-affected dead fuels.

For prescribed burning, see the daily Smoke dispersion product at: http://gacc.nifc.gov/oncc/predictive/weather/daily_smoke/Smoke.html

Despite the recent moisture we've received, much of northern CA remains in **Severe to Extreme** longer-term drought. Latest map: <http://droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?CA>

Resources

North OPS: Preparedness Level 1
National: Preparedness Level 1
MACS Mode 2



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Legend

Fuel Dryness

	Moist - Little or no risk for large fires.
	Dry - Low risk of large fires in the absence of a "High Risk" event.
	Very dry - Low/Moderate risk of large fires in the absence of a "High Risk" event.
	Data Unavailable.

High Risk Events

	Windy and Dry
	Lightning

Missing Stations

- Devore

California - South Area 7 Day Significant Fire Potential

Issued: Sunday, Mar 23, 2014

Parameters:

Predictive Service Area	Sat Mar 22	Sun Mar 23	Mon Mar 24	Tue Mar 25	Wed Mar 26	Thu Mar 27	Fri Mar 28	Sat Mar 29
SC01 - Eastern Sierra								
SC02 - Central Sierra								
SC03 - Southern Sierra								
SC04 - Sierra Foothills								
SC05 - Central Valley								
SC06 - Central Coast Interior								
SC07 - Central Coast								
SC08 - South Coast								
SC09 - Western Mountains								
SC10 - Eastern Mountains								
SC11 - Southern Mountains								
SC12 - Lower Deserts								
SC13 - Eastern Deserts								
SC14 - Central Mojave								
SC15 - Upper Deserts								
SC16 - Northern Deserts								

Weather

A weak ridge of high pressure building into California from the Pacific Ocean will bring warmer temperatures and a little lower humidity to the region through Monday. Temperatures will be around 10 degrees above normal away from the coast by Monday, with low 80s in the warmer valley locations. Temperatures will cool a couple degrees Tuesday as the ridge of high pressure weakens. A Pacific trough will bring significant cooling and a big increase in humidity to the region Wednesday and Thursday. This trough will also bring scattered showers to Central California from a Monterey/Fresno County line northward Tuesday night through Thursday afternoon. Most locations will receive less than a quarter inch of rainfall, but up to an inch of rainfall will fall over the Central Sierra and its associated foothills. The snow level will be around 6,000 feet. **Westerly winds of 20 to 30 mph with gusts to 50 mph will surface across the mountain ridges and desert passes Tuesday night through Thursday afternoon.** Another ridge of high pressure will bring warming and drying to the region Friday and Saturday.

Fuels/Fire Potential

Light initial attack activity will be possible across inland locations through Tuesday as temperatures warm and humidity lowers. There will be little or no fire activity Wednesday and Thursday as temperatures drop to below normal and humidity becomes high. Light wetting rains will cause dead fuels to moisten over the northern half of Central California Wednesday and Thursday. Warming and drying will bring a return of light IA activity Friday and Saturday.

Resources

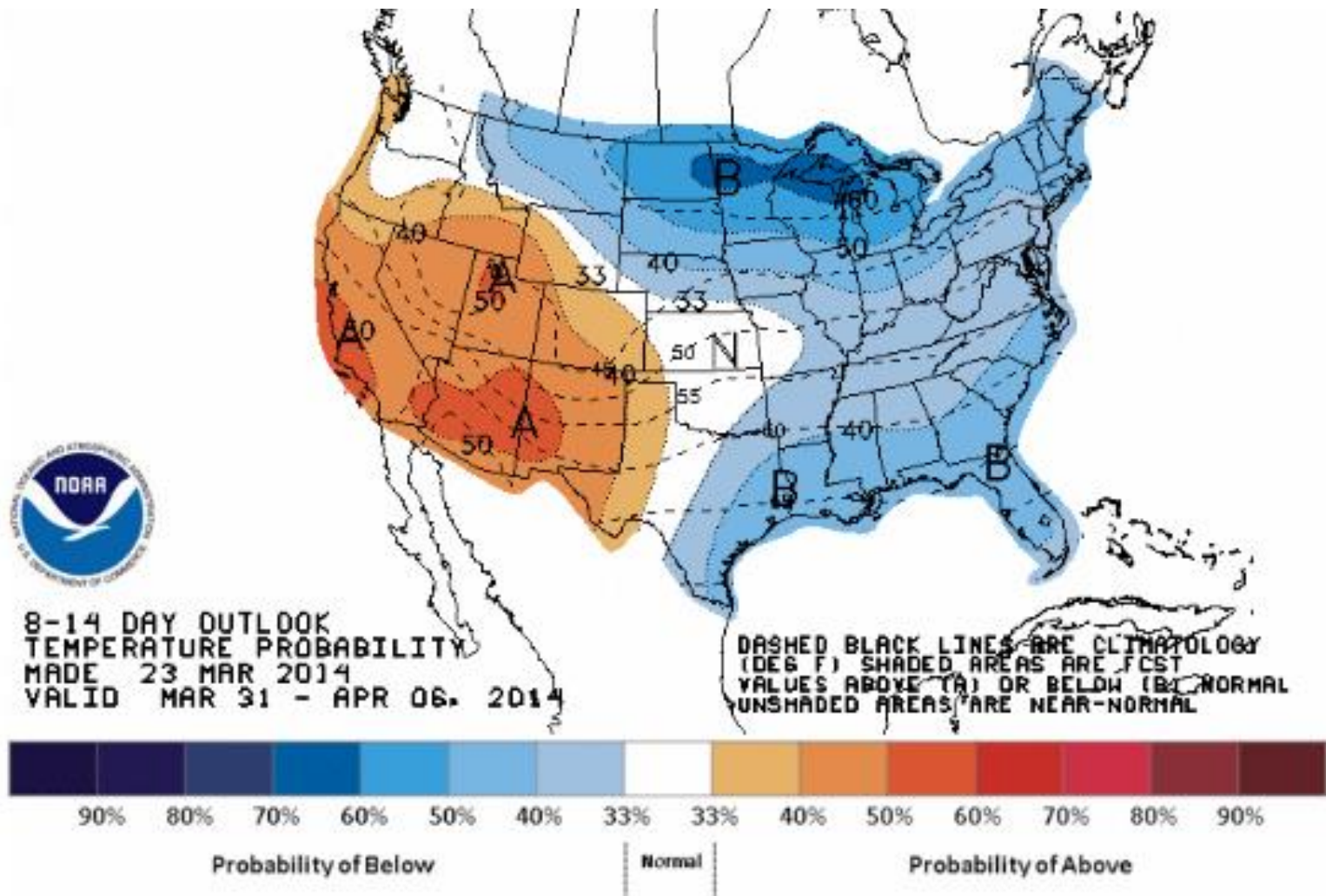
CWCG Preparedness Level 2, MACS Mode 2

<http://psgeodata.fs.fed.us/7day/action/forecast/8>



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8-14 Day Precipitation Probability Outlook for March 31 – April 6, 2014



<http://www.cpc.ncep.noaa.gov/products/predictions/814day/>

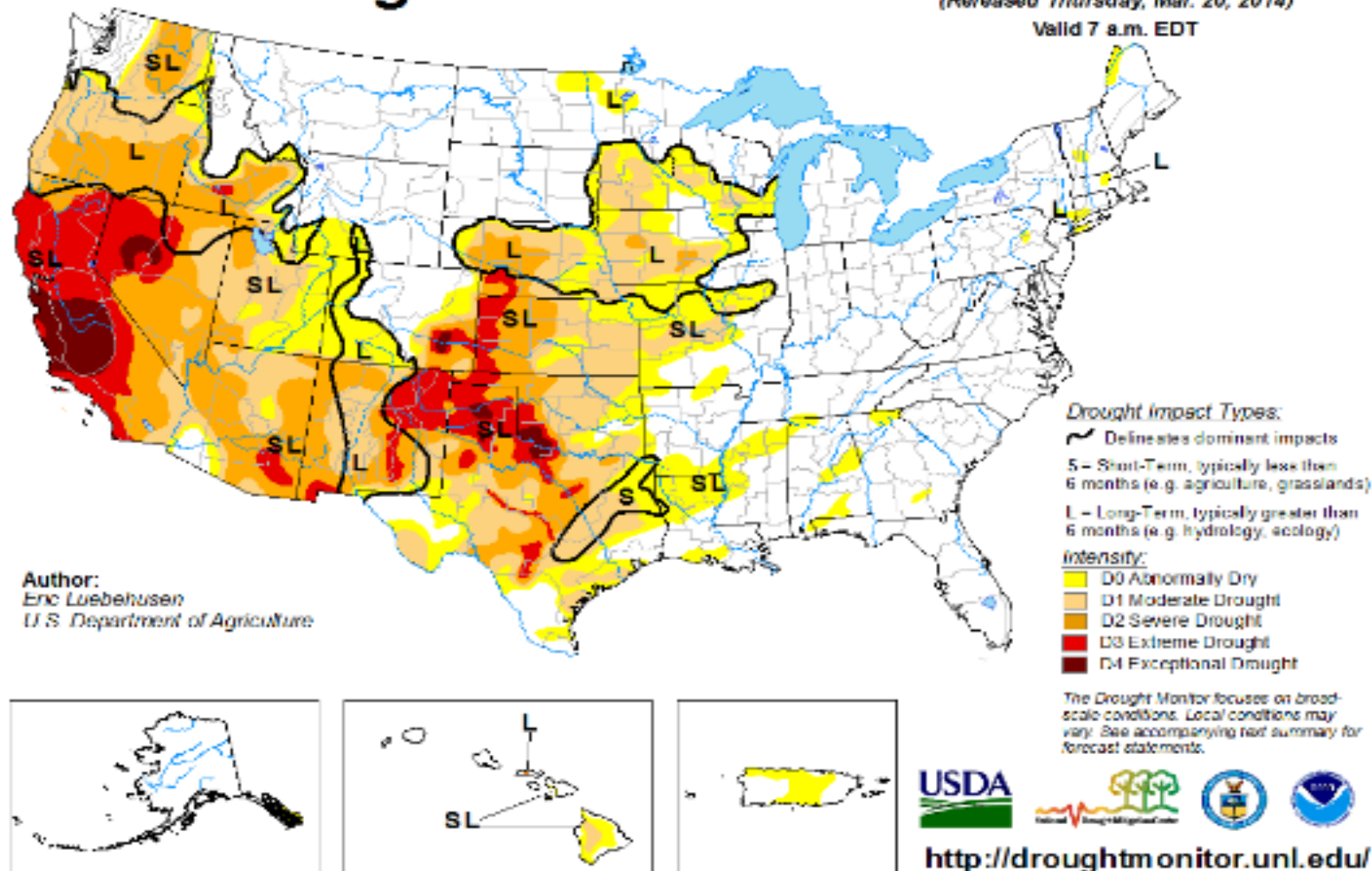


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U.S. Drought Monitor

March 18, 2014
(Released Thursday, Mar. 20, 2014)
Valid 7 a.m. EDT



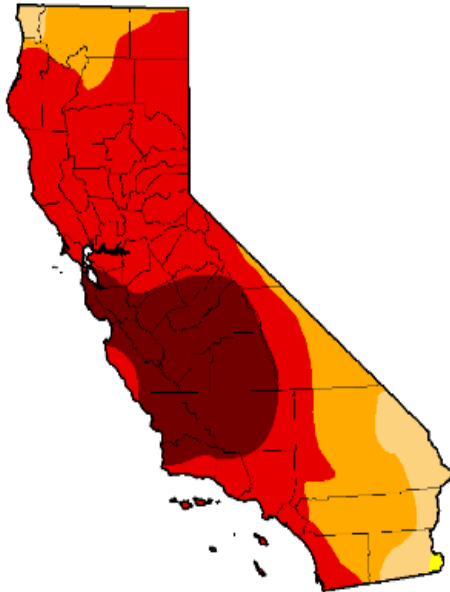
<http://droughtmonitor.unl.edu/>



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Weather Summary - Current Drought Conditions in California

U.S. Drought Monitor California



March 18, 2014

(Released Thursday March 20, 2014)

Valid 7 a.m. Eastern

Statistics type: ☒ Traditional (D0-D4, D1-D4, etc.) ☐ Categorical (D0, D1, etc.)

Drought Condition (Percent Area):

Week	Date	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	3/18/2014	0.01	99.99	99.80	93.08	71.78	22.37
Last Week	3/11/2014	0.01	99.99	94.58	90.81	66.89	22.37
3 Months Ago	12/17/2013	2.61	97.39	94.25	82.53	27.59	0.00
Start of Calendar Year	12/31/2013	2.61	97.39	94.25	87.53	27.59	0.00
Start of Water Year	10/1/2013	2.63	97.37	95.95	84.12	11.36	0.00
One Year Ago	3/19/2013	12.85	87.15	48.38	24.19	0.00	0.00

[View More Statistics](#)

Intensity:

D0 - Abnormally Dry
D1 - Moderate Drought
D2 - Severe Drought

D3 - Extreme Drought
D4 - Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying [text summary](#) for forecast statements.

Author(s):

Eric Luebbehusen, U.S. Department of Agriculture

The D4 (Exceptional Drought) is the worst drought category on the Drought Monitor and **the first time it's been used in California since this monitoring system started in 2000.** The degradation was made due to historically low rainfall amounts so far this winter, long-term precipitation deficits stretching several years, and a growing number of increasingly significant drought impacts. **In addition, 66% of California is now covered by D3/D4 conditions.**

Note: Updated Weekly

<http://droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?CA>

<http://www.wrh.noaa.gov/sto/droughtca.php>



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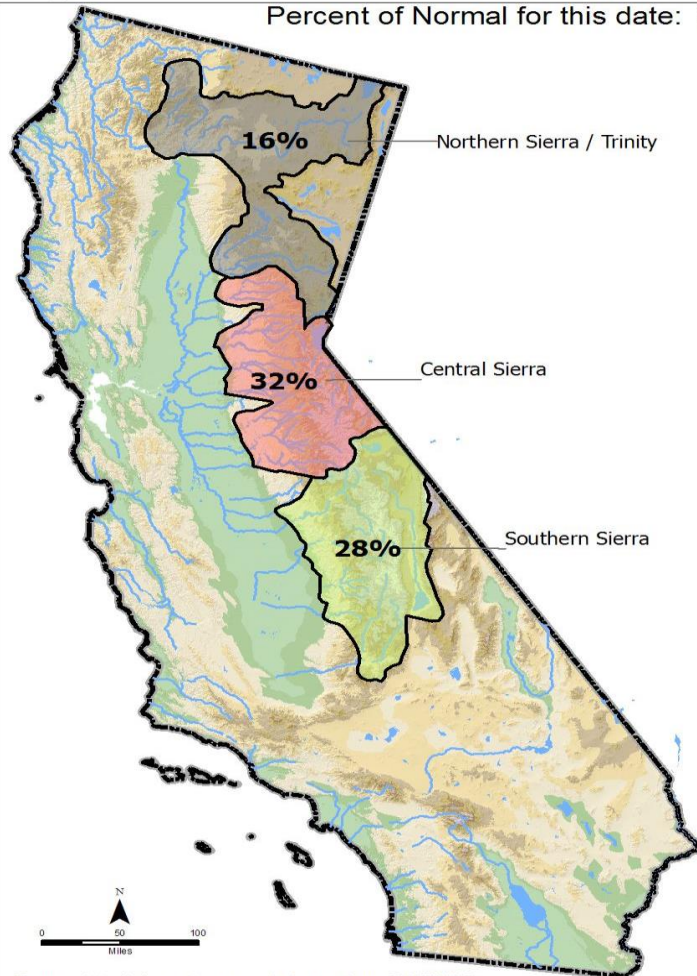
2014 Drought

Statewide Summary of Snow Water Content

Current Regional Snowpack from Automated Snow Sensors

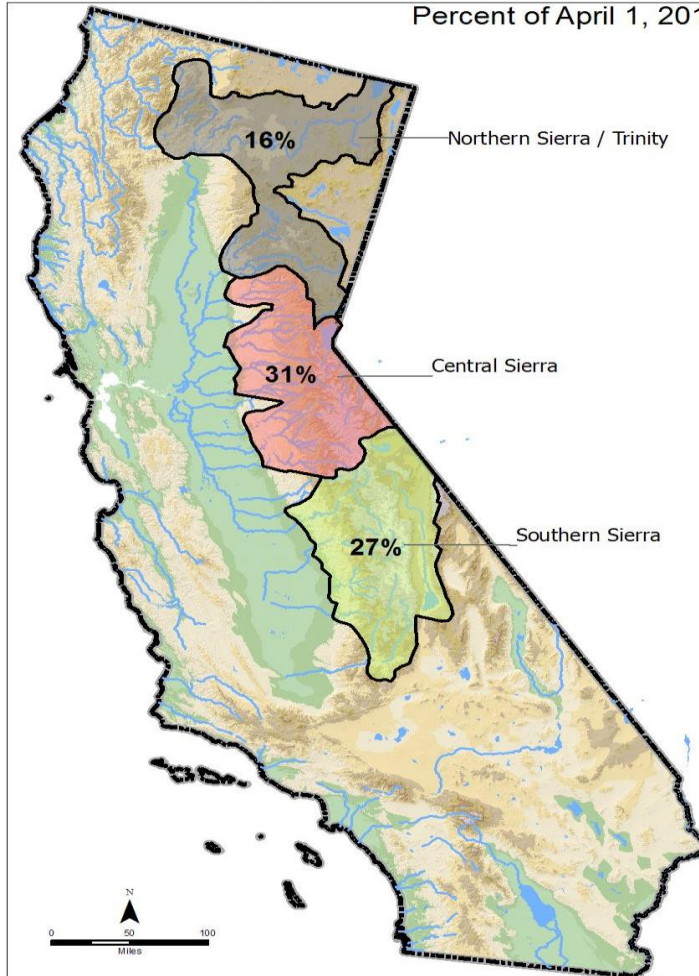


Percent of Normal for this date: 3/20/2014



Source: <http://cdec.water.ca.gov/cgi-progs/snow/DLYSWEQ>

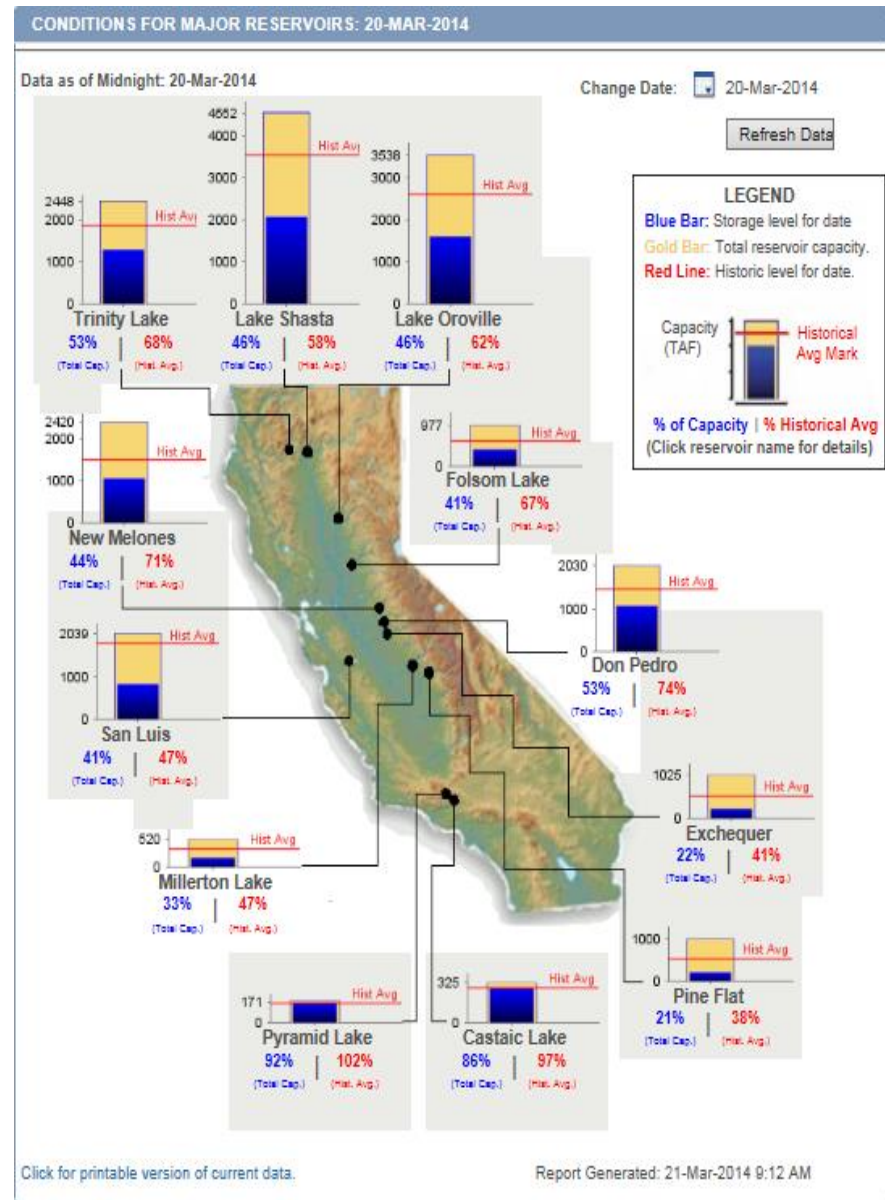
Percent of April 1, 2014 Average



Printed: March 20, 2014



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Reservoir Levels

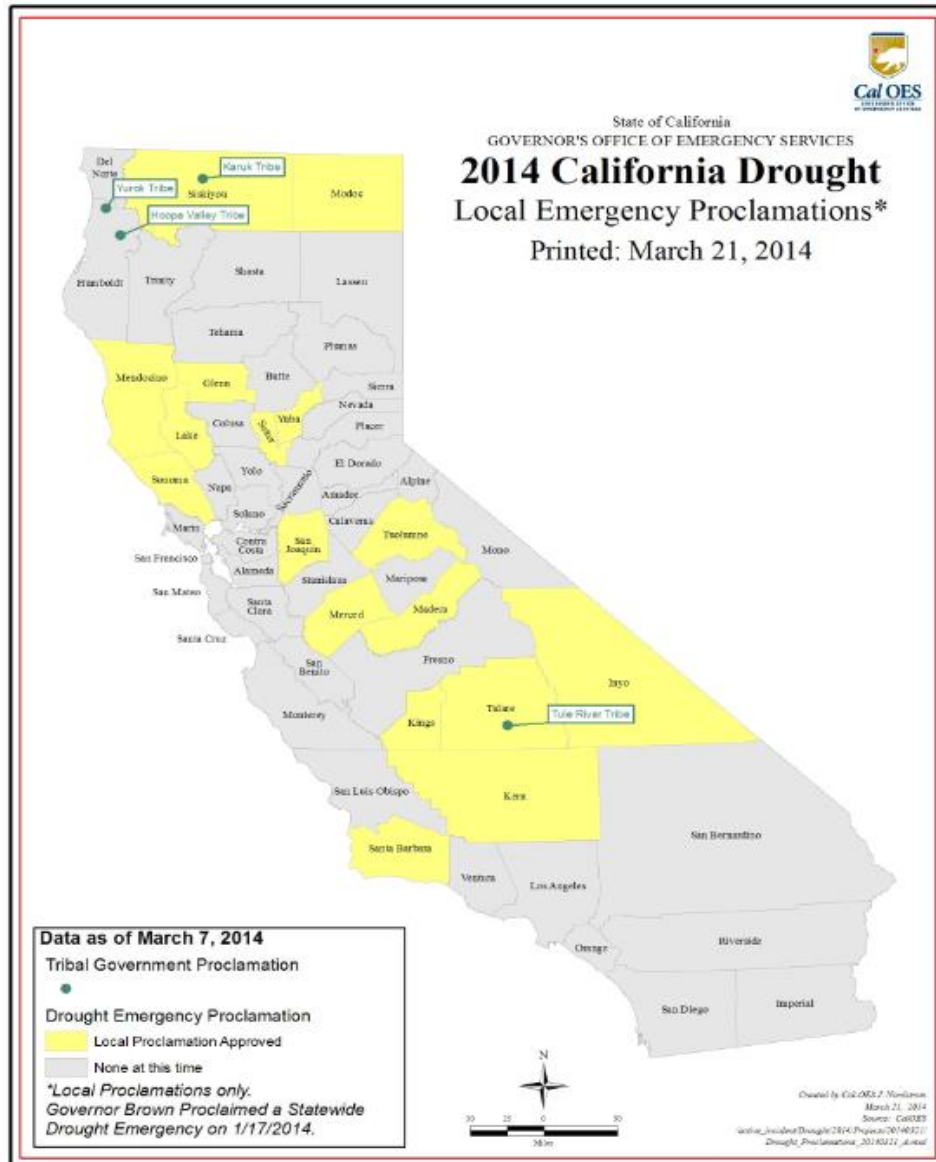
Many parts of California -- including Sacramento and Los Angeles -- marked calendar year 2013 as the driest on record. These extremely dry conditions follow two previous dry years statewide.

Storage in the reservoirs that typically help California cope with dry weather are well below average for this time of year.

River levels are low around the state. Along the North Coast, the Russian River, and the upper Sacramento River, levels are at their lowest points ever for this time of year.

Some water districts with a diversified portfolio of water sources and ample storage -- such as the Metropolitan Water District of Southern California, which serves 19 million people -- are prepared to weather a third dry winter.

Farmers who depend heavily on the State's two biggest water projects, the Central Valley Project and State Water Project, face minimal and uncertain supplies.



Proclamations

State

1/17/14 Governor Edmund G. Brown proclaimed a State of Emergency

Counties

Glenn (1/22/14)
Inyo (1/29/14)
Kern (1/14/14)
Kings (1/14/14)
Lake (1/17/14, ratified 3/4/14)
Madera (1/17/14)
Mendocino (1/7/14)
Merced (2/25/14)
Modoc (3/4/14)
San Joaquin (2/25/14)
Santa Barbara (1/17/14)
Siskiyou (3/11/2014)
Sonoma (2/25/14)
Sutter (2/11/14)
Tulare (2/4/14)
Tuolumne (2/4/14)
Yuba (2/18/14)

Tribal

Hoopa Valley Reservation (1/20/14)
[Sherwood Valley Pomo Indian Tribe \(2/9/14\)](#)
Yurok Reservation (1/29/14)
Tule River Indian Tribe (1/30/14)
Karuk Tribe (2/18/14)

Federal

None



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The United States Department of Agriculture (USDA) issued a secretarial disaster designation identifying 56 of 58 counties in California as primary natural disaster areas due to drought and 2 contiguous counties. This means that every county in California is now eligible to receive assistance.

Information as of 3/7/14

